

WHAT IS CLAIMED IS

1. A forming fabric, comprising:
 - a plurality of paper side weft yarns;
 - a plurality of binder weft yarns disposed in at least one group of at least two of said
 - 5 plurality of binder weft yarns;
 - a plurality of paper side warp yarns interlaced with said plurality of paper side weft yarns and said plurality of binder weft yarns;
 - a plurality of machine side weft yarns; and
 - a plurality of machine side warp yarns interlaced with said plurality of machine side weft
 - 10 yarns and said plurality of binder weft yarns, whereby said plurality of binder weft yarns form fewer knuckles over said plurality of paper side warp yarns than said plurality of paper side weft yarns.
2. The forming fabric of claim 1, wherein both said binder weft yarns of at least one binder group float below at least two consecutive paper side warp yarns.
3. The forming fabric of claim 1, wherein both of said binder weft yarns of at least one binder group flow below a plurality of at least two consecutive paper side warp yarns.
4. The forming fabric of claim 1, wherein both said binder weft yarns of at least one binder group in total pass more often below said machine side warp yarns than above said paper side warp yarns.

5. The forming fabric of claim 1, wherein at least one binder weft yarn of said at least one binder group passes above only one paper side warp yarn to form a knuckle and passes below a plurality of machine side warp yarns.

6. The forming fabric of claim 1, wherein each of said binder weft yarns of said at least one binder group pass above only one paper side warp yarn and below a plurality of machine side warp yarns.

7. The forming fabric of claim 1, wherein at least one binder weft yarn of said at least one binder group has an equal number of bindings with said machine side warp yarns and said paper side warp yarns.

8. The forming fabric of claim 1, wherein at least one binder weft yarn of said at least one binder group passes more often above said paper side warp yarns than below said machine side warp yarns.

9. The forming fabric of claim 1, wherein a binder weft yarn of said at least one binder group and a paper side weft yarn of said plurality of paper side weft yarns are positioned adjacent said binder group thereby forming knuckles over a common paper side warp yarn.

10. The forming fabric of claim 9, wherein said binder weft yarn and said paper side weft yarn are separated by at least one of at least one binder weft yarn and a paper side weft yarn that passes below said common paper side warp yarn.

11. The forming fabric of claim 1, wherein a plurality of pairs of warp yarns are each defined as one of said plurality of paper side warp yarns and a corresponding one of said plurality of machine side warp yarns, at least one of said plurality of binder weft yarns floating between at least two consecutive pairs of warp yarns before traveling one of from a paper side of the fabric to a machine side of the fabric and from said machine side of the fabric to said paper side of the fabric.

12. The forming fabric of claim 1, wherein a plurality of pairs of warp yarns are each defined as one of said plurality of paper side warp yarns and a corresponding one of said plurality of machine side warp yarns, at least one of said plurality of binder weft yarns float between at least two consecutive pairs of warp yarns and is bound at each end of said float by one of said paper side warp yarns and said machine side warp yarns, thereby forming a fabric stiffening binder yarn section.

13. The forming fabric of claim 1, wherein at least one of said plurality of paper side weft yarns is positioned adjacent to said group of at least two binder weft yarns, said at least one of said plurality of paper side weft yarns floating under at least two consecutive said paper side warp yarns, at least one of said binder weft yarns of said binder group forming a knuckle over one of the said at least two consecutive paper side warp yarns.

14. The forming fabric of claim 13, wherein said at least one of said plurality of paper side weft yarns floats under an odd number of said consecutive paper side warp yarns.

15. The forming fabric of claim 14, wherein said at least one of said plurality of paper side weft yarns floats under one of 3, 5 and 7 of said consecutive paper side warp yarns.

16. The forming fabric of claim 13, wherein a plurality of pairs of warp yarns are each defined as one of said plurality of paper side warp yarns and a corresponding one of said plurality of machine side warp yarns, said at least one of said plurality of paper side weft yarns floating between said warp yarns of each of at least two consecutive said pairs.

17. The forming fabric of claim 1, wherein at least one of said plurality of paper side warp yarns, said plurality of paper side weft yarns, said plurality of machine side warp yarns, said plurality of machine side weft yarns and said plurality of binder weft yarns have a different yarn diameter.

18. The forming fabric of claim 1, wherein at least one of said at least two binder weft yarns of said binder group has a different yarn diameter.

19. The forming fabric of claim 1, wherein the fabric has one of a 16 warp, a 20 warp, a 24 warp, a 28 warp, a 32 warp and a 40 warp repeat.

20. The forming fabric of claim 1, wherein the fabric has a greater than 40 warp repeat.

21. The forming fabric of claim 1, wherein said plurality of machine side wefts are single interlaced with said plurality of machine side warps over one of a 5 shaft repeat and a 6 shaft repeat.

22. The forming fabric of claim 1, wherein said plurality of machine side warps make multiple non-adjacent interlacings with said plurality of machine side wefts over one of an 8 shaft repeat and a 10 shaft repeat.

23. The forming fabric of claim 1, wherein at least some of said yarns are interlaced to form a weave on a paper side of the fabric, said weave one of a plain weave, a twill weave and a sateen weave.

24. The forming fabric of claim 1, wherein the fabric has a permeability of from approximately 200 c.f.m. to approximately 1,000 c.f.m.

25. A method of manufacturing a fiber web, comprising the steps of:
providing a forming fabric, including:

a plurality of paper side weft yarns;

a plurality of binder weft yarns disposed in at least one group of at least two of
said plurality of binder weft yarns;

a plurality of paper side warp yarns interlaced with said plurality of paper side
weft yarns and said plurality of binder weft yarns;

a plurality of machine side weft yarns; and

a plurality of machine side warp yarns interlaced with said plurality of machine
side weft yarns and said plurality of binder weft yarns, whereby said plurality of binder
weft yarns form fewer knuckles over said plurality of paper side warp yarns than said
plurality of paper side weft yarns; and

forming the fiber web using at least one said forming fabric.